

**Remarks**

Applicant respectfully submits that entry of this Response is proper as it makes no amendments to the claims other than to correct clerical errors. Applicant respectfully asks the Examiner to reconsider the rejection in view of the below Remarks.

The Examiner has objected to claim 25 as a substantial duplicate of claim 3. Claims 23 and 25 have been amended to correct the clerical error relating to their dependency. Accordingly, the objection to claim 25 is thereby obviated.

As a preliminary matter, Applicant notes that the Examiner has rejected independent claim 24 by simply referencing independent claim 1. Applicant respectfully notes that independent claims 1 and 24 are separate apparatus claims and requests that the Examiner appropriately identify, separately for each claim, where the elements of that claim are allegedly found in the prior art.

The Examiner has rejected independent claims 1, 22, and 24 under 35 U.S.C. §103 as obvious over Pelchy, U.S. Patent No. 5,857,963, at the time of the invention in view of Ito, U.S. Patent No. 5,454,366. Applicant respectfully requests reconsideration of these rejections in view of the below remarks.

**Independent Apparatus Claim 1**

As noted by the Examiner, Pelchy '963 does not anticipate independent claim 1 because all of the elements in this claims are not shown in this reference.

- First, claim 1 requires a circuit board folded from a planar blank circuit board. As noted by the Examiner, Pelchy '963 fails to disclose such a circuit board. See 9/1/05 Office Action at 5; 5/26/06 Office Action at 3.
- Second, claim 1 requires first and second sections of the board "extending in spaced relation one to the other and obliquely or crosswise to said image sensor." Contrary to the Examiner's assertion, Pelchy '963 has no such sections. The "two top horizontal members 26" identified by the Examiner as the first and second sections is really just the single, horizontal leg of a T-shaped support member. See Col.3, Ins. 23-27. Accordingly, these "sections" clearly do not extend in spaced relation to one another. The leg 26 is also parallel to the image sensor mounted to it. See Figs. 1-2. (In fact, the leg 26 has a recess corresponding to the size of, and accommodating, the image sensor. See Col.3, Ins. 30-32). Accordingly, the leg does not extend "obliquely or crosswise" to the image sensor.

Applicant respectfully submits that the T-shaped structure of Pelchy '963 is so fundamentally different from the structure of the present invention, as outlined above,

that it is simply unreasonable to suggest that the claimed invention is an obvious modification of Pelchy '963.

- First, Applicant respectfully notes that, in order for the claimed invention to be obvious over the prior art, there must be some suggestion or motivation in the prior art to make the relevant modification. See, e.g., MPEP 2143.01 ("The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination."). Here, there is no such suggestion to modify Pelchy '963 as would be necessary in order to arrive at the present invention, as Pelchy explicitly (and at some length) teaches to specifically use the T-shaped support member. As explained above, Pelchy '963 has a horizontal member (26) on which the imager package is mounted, and a single vertical member (25) extending down from the middle of the horizontal member, such that circuit components are mounted on either side of this single vertical member. See Fig.1. This T-shaped structure is a fundamental aspect of its design. See, e.g., Abstract; Col.1, Ins. 48-53; Claim 1. There is simply no suggestion that it would be desirable to change this basic nature of its design in order to arrive at the particular three-section, folded board recited in claim 1. The fact that the basic design of Pelchy '963 could possibly be completely changed to arrive at the present invention, such hindsight is impermissible—there must have been some suggestion in the reference to do so. *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d

1430, 1432 (Fed. Cir. 1990) (fact that prior art “may be capable of being modified to run the way the apparatus is claimed, there must be some suggestion or motivation in the reference to do so.”).

- Second, Applicant respectfully submits that, even if Ito were combined with Pelchy '963, this would still not produce the invention recited in claim 1. Specifically, Claim 1 requires that the “image sensor is arranged on one end of said circuit board opposite said third section.” However, the first, second and third sections of the folded board identified by the examiner are all formed via fold lines that extend axially. See Fig. 5, Col.4, lns 22-27. These sections, including the section “between” the first and second sections, all extend in parallel from the image sensor. The image sensor is not arranged at an opposite end of the board as the third section.

Applicant respectfully notes that all of these literal differences between the prior art references and the language of claim 1 are reflective of the basic structural differences between the present invention and the prior art. Applicant notes that it is clear from a simple comparison of the present invention to the prior art that these are completely different structures, and that that one skilled in the art looking at Pelchy '963 would not really make the drastic changes to it that would be necessary in order to arrive at the present invention. Applicant respectfully submits that the Examiner is

attempting to reconstruct the claimed invention by piecing together different elements in the prior art, using the Applicant's disclosure as a roadmap, to make modifications to Pelchy '963 that one skilled in the art would not really make (and that would still not produce the present invention), which is improper. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) (suggestion must be found in the prior art, not the applicant's disclosure).

### **Independent Method Claim 22**

Similar to independent claim 1, independent method claim 22 requires the folding of a planar blank board "in such a way that a third section is located between a first section and a second section, and *wherein said image sensor is bonded to said circuit board at an end of said board opposite said third section.*" As explained above, there is simply no suggestion to so completely change the basic nature of the Pelchy '963 device in order to use a board such as that disclosed in Ito or any other folded blank board. Moreover, as explained above, even if the combination of Pelchy '963 and Ito were made, this would still not result in the invention recited in claim 22, as this combination would still not disclose folding a blank board into three sections such that the image is bonded to the circuit board "at an end of said board opposite said third section."

**Independent Apparatus Claim 24**

Applicant respectfully notes that the Examiner has not yet addressed numerous limitations of Claim 24, having only stated “See Examiner’s notes regarding rejection of claim 1.”

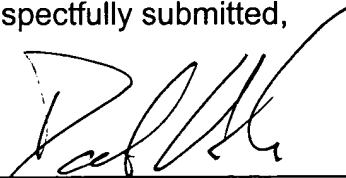
Applicant again submits that claim 24 even recites even further clarifying distinctions from the prior art, reciting several particular aspects of the orientation of the image sensor and the different sections of the circuit board. Specifically, claim 24 recites that the first and second sections are “substantially parallel to each other” and “substantially perpendicular to the image pick-up surface” of the sensor, and that the sensor is bonded to the first end of the first and second sections, and that the third section is integrally formed with the second end of the second section. The cited references do not disclose this particular arrangement of the sections and image sensor, as they teach very different designs as discussed above.

For each of these reasons, Applicant respectfully submits that independent claims 1, 22, and 24 are allowable over the cited art.

Applicant submits that, in light of the amendment herein, generic claim 1 is allowable, and thus, withdrawn claims 6-7, 10-12, and 16 are also allowable.

It is respectfully submitted that claims 1-8, 10-19, and 21-25, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,



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Wesley W. Whitmyer, Jr., Registration No. 33,558  
David W. Aldrich, Registration No. 51,159  
Attorney for Applicants  
ST.ONGE STEWARD JOHNSTON & REENS LLC  
986 Bedford Street  
Stamford, CT 06905-5619  
203 324-6155